

VPDES PERMIT FACT SHEET

This document gives pertinent information concerning the reissuance of the VPDES permit listed below. This permit is being processed as a Minor, Industrial permit. The effluent limitations contained in this permit will maintain the Water Quality Standards of 9 VAC 25-260 et seq. The facility serves as a bulk petroleum product storage and distribution center. Stormwater runoff from a petroleum storage tank bermed area and truck loading rack area is discharged from Outfalls 001, 002 and 003 to unnamed tributaries of the James River. This permit action consists of combining permit No.VA0054291 and permit No.VA0055409, revising permit limitations and monitoring requirements, and revising permit conditions. SIC Code: 4226 – *Special Warehousing and Storage Not Elsewhere Specified*.

1. Facility Name and Address: IMTT-Virginia Richmond Terminal
5500 Old Osborne Turnpike
Richmond, VA 23231

Facility Contact Name: Jennifer LaCroix
Title: Environmental Health and Safety Manager
Mailing Address: 2801 South Military Highway
Chesapeake, VA 23323
Telephone: (757) 485-3000
Email: JenniferLaCroix@IMTT.Com
2. Permit Number: VA0055409
Permit Expiration Date: August 12, 2013
3. Owner Name and Address: IMTT-Virginia
2801 South Military Highway
Chesapeake, VA 23323
Telephone: (757) 485-3000
4. Application Complete: November 12, 2014
Permit Drafted By: Laura Galli November 12, 2014
Permit Reviewed By: Zack Oremland November 25, 2014
Kyle Ivar Winter December 2, 2014
5. Receiving Stream Name: UT James River (001); UT Almond Creek (002, 003)
Basin: James River
Subbasin: Lower James River
Section: 1a
Class: III
Special Standards: None
River Mile: 001: 2CXBU000.15; 002: 2-XXZ000.13; 003: 2-XOH000.17
7-Day, 10-Year Low Flow (7Q10): 0 MGD
1-Day, 10-Year Low Flow (1Q10): 0 MGD
30-Day, 5-Year Low Flow (30Q5): 0 MGD
30-Day, 10-Year Low Flow (30Q10): 0 MGD
7Q10 High Flow: 0 MGD
1Q10 High Flow: 0 MGD
Harmonic Mean Flow (HM): 0 MGD
Tidal? NO
On 303(d) list? YES
6. **Operator License Requirements:** A licensed operator is not required because, in accordance with GM96-006 (Pgs 1-2), the retention basin and oil/water separator that serve as treatment for this facility's stormwater are not considered to be forms of biological, chemical, or physical treatment as intended by the requirements contained in 9 VAC 25-31-200.C of the *VPDES Permit Regulation*.

7. **Reliability Class:** Not Applicable to industrial facilities.

8. **Permit Characterization:**

(X) Existing Discharge	(X) Reissuance
(X) Effluent Limited	(X) Water Quality Limited
(X) Industrial	(X) Whole Effluent Toxicity Required
(X) Private	

9. **Discharge Description:**

Table 1: Discharge Description

Outfall	Discharge Source	Treatment	Max 30-day Average Flow
001	Stormwater runoff from petroleum storage tank bermed area and truck loading rack area. Stormwater is held in the bermed area until manually released via gate valves.	Oil/Water Separator, activated carbon box, and holding pond	0.004 MGD
002		Collection Pond	0.005 MGD
003		Oil/Water Separator	No discharge

* Outfall 001 East was renamed 003 in the 2015 permit reissuance after the consolidation of VA0055409 and VA0054291.

See **Attachment A** for Site Map and flow diagrams.

10. **Sewage Sludge Use or Disposal:** Not Applicable

11. **Discharge Location Description:**

Coordinates:	Latitude	Longitude
Outfall 001	37° 30' 30"	77° 24' 50"
Outfall 002	37° 30' 34"	77° 24' 50"
Outfall 003	37° 30' 29"	77° 24' 44"

See **Attachment A** for aerial photograph.

Map Name: Richmond (126C) Quadrangle

12. **Material Storage:**

The facility receives, stores, and distributes bulk volumes of gasoline and non-gasoline products. The ASTs are regulated under 9 VAC 25-91-10 et seq. (Facility and Above Ground Storage Tank Regulations). The areas surrounding all above-ground storage tanks are bermed and are designed to capture spills/leaks and storm water runoff. Total facility tank capacity exceeds 10 million gallons.

13. **Ambient Water Quality Information:**

Ambient water quality data are not used in cases where the receiving streams are dry at the theoretical low flows used for permit limitation development. The receiving streams were assessed as a Category 2B waters in the 2012 305(b)/303(d) Water Quality Assessments Integrated Report. See **Attachment B** for Flow Frequency Memorandum by Jennifer Palmore, P.G., dated September 17, 2014.

14. **Antidegradation Review & Comments:** Tier 1 X Tier 2 Tier 3

The State Water Control Board's Water Quality Standards includes an antidegradation policy (9 VAC 25-260-30). All state surface waters are provided one of three levels of antidegradation protection. For Tier 1 or existing use protection, existing uses of the water body and the water

quality to protect those uses must be maintained. Tier 2 water bodies have water quality that is better than the water quality standards. Significant lowering of the water quality of Tier 2 waters is not allowed without an evaluation of the economic and social impacts. Tier 3 water bodies are exceptional waters and are so designated by regulatory amendment. The antidegradation policy prohibits new or expanded discharges into exceptional waters. The receiving water bodies (UT James River and UT Almond Creek) are considered Tier 1 waters due to their ephemeral nature. (See **Attachment B** for Flow Frequency Memorandum.)

15. **Site Inspection:** Date: April 17, 2014
Performed by: Heather Deihls (See **Attachment C**)

16. **Effluent Screening & Limitation Development:**

During the 2008 Permit reissuance, the discharges from outfalls 001, 002 and 003 were identified as process wastewater discharges because stormwater runoff generating from the petroleum storage tank bermed area and truck loading rack area would be contained first and then released (potentially during dry weather conditions), rather than discharging directly during storm event. DEQ advice memo, dated September 9, 2014, includes the following statement which clarifies the definition of stormwater:

“While we may treat the stormwater (SW) more like a ‘process water’ given certain site specific circumstances, contaminated SW that is contained and released (potentially during dry weather conditions) is not considered a ‘process water.’ This logic applies to SW that is captured and treated; treatment may entail an oil/water separator or settling through retention designed to remove solids.”

All discharges of treated precipitation from Outfalls 001, 002 and 003 are considered stormwater as part of the 2015 permit reissuance.

Outfalls 001, 002, and 003 – Stormwater Evaluation

IMTT Virginia – Richmond Terminal Facility falls under industrial Sector P – Land Transportation and Warehousing (SIC 4226), which recommends specific management requirements for stormwater that falls on site. Outfall 001 discharges stormwater runoff from the petroleum storage tank bermed area and truck loading rack area. The stormwater is treated by an oil/water separator and holding pond before being discharged. Outfall 002 discharges stormwater runoff from the tank farm area – a pipe delivers stormwater through the berm to the final discharge point. Outfall 003 discharges stormwater runoff from a truck rack, which is not currently in use, to an oil/water separator.

Stormwater discharges associated with industrial activity require a permit to include stormwater management provisions, which are: effluent limitations and compliance monitoring; analytical monitoring; stormwater management evaluation; stormwater special conditions; and a stormwater pollution prevention plan (SWPPP).

Effluent Limitation Evaluations

Guidance Memo 96-001 recommends that chemical-specific water quality-based limits not be placed on stormwater outfalls at this time because the methodology for developing limits and the proper method of sampling is still a concern and under review/reevaluation by EPA. Exceptions would be where a VPDES permit for a stormwater discharge has been issued that includes effluent limitations (backsliding must be considered before these limitations can be modified). A review of discharge monitoring report (DMR) data provided in **Attachment D** indicates that the permittee has been consistently unable to meet the metals limitations included in the 2008 permit despite the BMP improvements to installed treatment facilities. 9VAC25-31-220.L.2.e provides for backsliding when this is the case. In addition, effluent limitations were mistakenly applied to the facility's discharges

as the discharges were identified as process wastewater discharges during the previous permit reissuance. 9VAC25-31-220.L.2.b(2) provides antibacksliding justification when this is the case.

Where limitations are not established, pollutants are typically assessed against screening criteria developed solely to identify those additional pollutants that should be given special emphasis during development and assessment of the SWPPP. The SWPPP, required by Part I.C.3 of the permit, is designed to reduce pollutants in stormwater runoff. To determine which pollutants are of concern, stormwater effluent data is compared to the more stringent of two times the pollutant's acute water quality criterion as outlined by the *Virginia Water Quality Standards* (WQS) or the pollutant's benchmark monitoring concentration as contained in DEQ's VPDES General Permit for Stormwater Associated with Industrial Activity and in the VPDES Permit Manual dated March 27, 2014, Section IN4 – Industrial Stormwater Discharges.

The calculation of two times the acute criterion takes into account the receiving stream and effluent characteristics and is calculated using the MSTRANTI spreadsheet for wasteload allocations (**Attachment D**). For this facility, since the receiving stream is a dry ditch, ambient stream characteristics are assumed to be the same as the effluent. The MSTRANTI Spreadsheet is used only as a tool to calculate two times the acute criterion for the stormwater evaluation.

Benchmark pollutants are those pollutants that, due to the nature of the industrial activity or materials stored on the site, have the potential to contribute pollutants to stormwater discharges. While pollutant benchmarks are established based on specific industrial activities, it is assumed that reported concentrations greater than any of the benchmarks warrant being reviewed, regardless of the industrial activity.

A comparison of effluent data to the VAR05 Industrial Stormwater General Permit (ISWGP) benchmarks contained in 9 VAC 25-151-10 et seq. and to acute screening criteria, as applicable, is presented below in Tables 2, 3 and 4, for Outfalls 001, 002 and 003, respectively. Effluent data collected during the permit cycle and reported on Discharge Monitoring Reports (DMRs) from 2010 to 2014 is included in **Attachment D**. Data not included was reported as believed absent or <QL and was considered absent for the purpose of this evaluation. Data in bold text indicates a concentration above the corresponding benchmark or screening value, with the corresponding screening and/or benchmark value in bold text as well. Parameter names in bold text indicate those which are specified in ISWGP Sector P. Parameters reported that exceeded screening criteria are copper, lead and zinc. None of the parameters exceeded the respective benchmark values. See the metals discussion below in this section for additional information.

In cases where the reported concentrations exceed either screening criteria or the benchmarks, the permit requires that the permittee implement BMPs for the problem outfalls in accordance with the SWPPP to reduce the pollutant concentrations in the stormwater runoff. The effectiveness of the SWPPP will be evaluated through the required monitoring for all parameters listed in Part I.A of the permit. During the term of the permit, monitoring data demonstrating effluent concentrations that exceed the screening criteria included in the permit will trigger action by the permittee, including review of the SWPPP and BMP. TSS and TPH are included as monitoring requirements in the permit to satisfy the requirements of Sector P and the Petroleum Storage and Transportation – specific recommended monitoring.

Table 2: Stormwater Effluent Evaluation: **Outfall 001**

Parameter	Units	Highest Detected Value 001	Screening Level (2x acute)	Benchmark Value
Hardness	µg/L	15.9	NA	NA
Cadmium	µg/L	1.2	1.6	NA
Copper	µg/L	9.0	7.3	18
Lead	µg/L	105	41	120

Zinc	µg/L	93	72	120
TSS	mg/L	NA	NA	100
pH	S.U.	8.40	NA	6.0-9.0
Total Organic Carbon (TOC)	mg/L	8.1	NA	110
Total Petroleum Hydrocarbon (TPH)	mg/L	0.85	NA	15

Table 3: Stormwater Effluent Evaluation: **Outfall 002**

Parameter	Units	Highest Detected Value 002	Screening Level (2x acute)	Benchmark Value
Hardness	µg/L	57.8	NA	NA
Copper	µg/L	8.0	14	18
Zinc	µg/L	34	130	120
TSS	mg/L	NA	NA	100
pH	S.U.	7.8	NA	6.0-9.0
Total Organic Carbon (TOC)	mg/L	7.8	NA	110
Total Petroleum Hydrocarbon (TPH)	mg/L	0.96	NA	15

Table 4: Stormwater Effluent Evaluation: **Outfall 003**

Parameter	Units	Highest Detected Value 003	Screening Level (2x acute)	Benchmark Value
Hardness	µg/L	NA	NA	NA
Copper	µg/L	NA	7.3	18
TSS	mg/L	NA	NA	100
pH	S.U.	NA	NA	6.0-9.0
Total Organic Carbon (TOC)	mg/L	NA	NA	110
Total Petroleum Hydrocarbon (TPH)	mg/L	NA	NA	15

Section IN-4 of GM14-2003 states, "If the monitoring data reported by the permittee indicates conclusively that a parameter is not present in the stormwater runoff, then that parameter may be dropped." Total Recoverable Cadmium does not exceed the screening level (2x acute) or the benchmark value; however, because it has been detected regularly and was limited in the 2008 permit, continued monitoring for this parameter is appropriate. Total Recoverable Copper, Total Recoverable Zinc, and Total Recoverable Lead do exceed the screening level (2x acute); therefore, continuation of monitoring for these parameters is appropriate and based on Permit Writer Judgment (PWJ), which is defined as the best professional judgment of the permit writer to assign limitations and or monitoring requirements protective of water quality that are not explicitly contained in the *Virginia Water Quality Standards* (9 VAC 25-260 et seq.) or federal effluent limit guidelines. Parameters for which limitations and/or monitoring requirements have been added or modified are listed and discussed below.

Total Recoverable Cadmium - Outfall 001: DMR data submitted for cadmium never exceeded screening criteria or benchmark values. However, because of the consistent detections, continued monitoring for this parameter is appropriate.

Total Recoverable Copper – Outfalls 001, 002 and 003

- Outfall 001: DMR data submitted for copper exceeded screening criteria once in outfall 001 (December 2013), see **Attachment D**. Benchmark value was never exceeded. Because this pollutant was limited in the 2008 permit and slightly exceeded the screening criterion in the evaluation above, continued monitoring is appropriate. The screening criterion (2x acute

WLA) is more stringent than the benchmark concentration for this parameter. Consequently, the copper screening criterion will be used as a comparative value in Part I.C.1 of the permit. Copper will not be listed as a benchmark parameter under Part I.C.5 due to more stringent screening criteria that are addressed in Part I.C.1.

- Outfall 002: DMR data submitted for copper never exceeded screening criteria or benchmark values. However, because of the consistent detections, continued monitoring for this parameter is appropriate.
- Outfall 003: Total recoverable copper was not limited for outfall 003 in the 2008 permit; therefore, antibacksliding is not a concern. There is no DMR data for copper from outfall 003 as this outfall currently does not discharge (see **Attachment D**). However, because of the potential to discharge, continued monitoring is appropriate. The screening criterion (2x acute WLA) is more stringent than the benchmark concentration for this parameter. Consequently, the copper screening criteria will be used as a comparative value in Part I.C.1 of the permit. Copper will not be listed as a benchmark parameter under Part I.C.5 due to more stringent screening criteria that are addressed in Part I.C.1.

Total Recoverable Lead – Outfall 001: DMR data submitted for lead exceeded the screening criterion twice (December 2012 and December 2013, **Attachment D**), while the benchmark value was never exceeded. Because this pollutant was limited in the 2008 permit and exceeded the screening criterion in the evaluation above, continued monitoring is appropriate. The screening criterion (2x acute WLA) is more stringent than the benchmark concentration for this parameter. Consequently, the lead screening criteria will be used as a comparative value in Part I.C.1 of the permit. Lead will not be listed as a benchmark parameter under Part I.C.5 due to more stringent screening criteria that are addressed in Part I.C.1.

Total Recoverable Zinc – Outfalls 001 and 002:

- Outfall 001: DMR data submitted for zinc exceeded the screening criterion twice (December 2012 and December 2013, **Attachment D**), while the benchmark value was never exceeded. Because this pollutant was limited in the 2008 permit and exceeded the screening criterion in the evaluation above, continued monitoring is appropriate. The screening criterion (2x acute WLA) is more stringent than the benchmark concentration for this parameter. Consequently, the zinc screening criteria will be used as a comparative value in Part I.C.1 of the permit. Zinc will not be listed as a benchmark parameter under Part I.C.5 due to more stringent screening criteria that are addressed in Part I.C.1.
- Outfall 002: DMR data submitted for zinc never exceeded screening criteria or benchmark values. However, because of the consistent detections, continued monitoring for this parameter is appropriate.

pH – Outfalls 001, 002 and 003:

The pH limit is derived from 9 VAC 25-260-50 (Water Quality Standards) for discharges to Class II or Class III waters in the Piedmont and Coastal Zones.

Total Organic Carbon (TOC) – Outfalls 001, 002 and 003: The TOC limitation originated from previous agency guidance for permitting of Bulk Oil Storage Facilities (Permit Manual, issued July 1995, Appendix IN – Industrial, Part F.2.d). TOC is also required to be monitored for discharges associated with hydrostatic testing in the *Virginia Pollutant Discharge Elimination System (VPDES) General Permit Regulation for Discharges from Petroleum Contaminated Sites, Groundwater Remediation, and Hydrostatic Tests* (VAG83). Since TOC monitoring serves as an indicator parameter for non-petroleum organic substances, its monitoring will remain in the 2014 permit reissuance for all three outfalls.

Total Petroleum Hydrocarbons (TPH) – Outfalls 001, 002 and 003: The 2015 permit monitoring requirement for TPH is based on required benchmark monitoring for stormwater discharges for industrial sector P – Land Transportation and Warehousing (GM14-2003, Section IN-4, Pg. 7). Because there is no process water discharge at the facility, and because the facility has dry weather flows, the petroleum storage and transportation sector-specific limit for TPH (GM14-2003, Section IN-5, Pg. 3) is not included in the 2015 permit.

Whole Effluent Toxicity (WET): 48-Hour Static Acute Test using Ceriodaphnia dubia – Outfall 001: The Whole Effluent Toxicity limitation has been carried forward to the 2015 permit. In accordance with GM00-2012, if the facility has an effective WET limit, it has to stay in the permit in to be in accordance with antibacksliding. However, instead of the limitation being applied to two species as in the 2002 and 2008 permits, the limitation has been applied to the most sensitive organism (*C.dubia*) because 1) the permittee has complied with the WET limitation since its implementation in 2002 (with only one exception in 2009, see **Attachment E**), 2) monitoring for a single species rather than two represents a significant cost savings to the permittee, and 3) because of the significant changes to the current permit, WET results for the most sensitive species will provide adequate information regarding correct implementation of BMPs and SWPPP at the facility. WET results will be helpful to determine if a toxicity program will be necessary for the facility for the next permit cycles.

Hardness – Outfalls 001, 002 and 003: Continued monitoring for hardness in all three outfalls is carried over from the 2008 permit.

Table 3: Outfall 001 Basis for Final Limitations and Monitoring Requirements

EFFLUENT CHARACTERISTICS	BASIS FOR LIMITS	DISCHARGE LIMITS			MONITORING REQUIREMENTS	
		MONTHLY AVERAGE	MIN	MAX	FREQUENCY	SAMPLE TYPE
Flow (MG)	NA	NL	NA	NL	1 per 6 Months	Estimate
pH (s.u.)	1	NL	6.0	9.0	1 per 6 Months	Grab
Total Suspended Solids (TSS)(mg/L)	2	NL	NA	NL	1 per 6 Months	Grab
Total Petroleum Hydrocarbons (TPH) (mg/L)	2	NL	NA	NL	1 per 6 Months	Grab
Total Organic Carbon (TOC)	3	NL	NA	NL	1 per 6 Months	Grab
Whole Effluent Toxicity (WET): 48-hour Static Acute Test using <i>Ceriodaphnia dubia</i> (TUa)	3	NL	NA	1.0	1 per Year	Grab
Total Recoverable Cadmium (µg/L)	3	NL	NA	NL	1 per 6 Months	Grab
Total Recoverable Copper (µg/L)	3	NL	NA	NL	1 per 3 Months	Grab
Total Recoverable Lead (µg/L)	3	NL	NA	NL	1 per 3 Months	Grab
Total Recoverable Zinc (µg/L)	3	NL	NA	NL	1 per 3 Months	Grab
Hardness	NA	NL	NA	NL	1 per Year	Grab
Total Phosphorus (TP)	4	NL	NA	NL	1 per 6 Months	Grab
Total Kjeldahl Nitrogen (TKN)	4	NL	NA	NL	1 per 6 Months	Grab
Nitrite+Nitrate	4	NL	NA	NL	1 per 6 Months	Grab
Total Nitrogen (TN)	4	NL	NA	NL	1 per 6 Months	Calculated

Table 4: Outfall 002 Basis for Final Limitations and Monitoring Requirements

EFFLUENT CHARACTERISTICS	BASIS FOR LIMITS	DISCHARGE LIMITS			MONITORING REQUIREMENTS	
		MONTHLY AVERAGE	MIN	MAX	FREQUENCY	SAMPLE TYPE
Flow (MG)	NA	NL	NA	NL	1 per 6 Months	Estimate
pH (s.u.)	1	NL	6.0	9.0	1 per 6 Months	Grab
Total Suspended Solids (TSS)(mg/L)	2	NL	NA	NL	1 per 6 Months	Grab
Total Petroleum Hydrocarbons (TPH) (mg/L)	2	NL	NA	NL	1 per 6 Months	Grab
Total Organic Carbon (TOC)	3	NL	NA	NL	1 per 6 Months	Grab
Total Recoverable Copper (µg/L)	3	NL	NA	NL	1 per 6 Months	Grab
Total Recoverable Zinc (µg/L) ^(b)	3	NL	NA	NL	1 per 6 Months	Grab
Hardness	NA	NL	NA	NL	1 per Year	Grab
Total Phosphorus (TP)	4	NL	NA	NL	1 per 6 Months	Grab
Total Kjeldahl Nitrogen (TKN)	4	NL	NA	NL	1 per 6 Months	Grab
Nitrite+Nitrate	4	NL	NA	NL	1 per 6 Months	Grab
Total Nitrogen (TN)	4	NL	NA	NL	1 per 6 Months	Calculated

Table 5: Outfall 003 Basis for Final Limitations and Monitoring Requirements

EFFLUENT CHARACTERISTICS	BASIS FOR LIMITS	DISCHARGE LIMITS			MONITORING REQUIREMENTS	
		MONTHLY AVERAGE	MIN	MAX	FREQUENCY	SAMPLE TYPE
Flow (MG)	NA	NL	NA	NL	1 per 6 Months	Estimate
pH (s.u.)	1	NL	6.0	9.0	1 per 6 Months	Grab
Total Suspended Solids (TSS)(mg/L)	2	NL	NA	NL	1 per 6 Months	Grab

Total Petroleum Hydrocarbons (TPH) (mg/L)	2	NL	NA	NL	1 per 6 Months	Grab
Total Organic Carbon (TOC)	3	NL	NA	NL	1 per 6 Months	Grab
Total Recoverable Copper (µg/L)	3	NL	NA	NL	1 per 6 Months	Grab
Hardness	NA	NL	NA	NL	1 per Year	Grab
Total Phosphorus (TP)	4	NL	NA	NL	1 per 6 Months	Grab
Total Kjeldahl Nitrogen (TKN)	4	NL	NA	NL	1 per 6 Months	Grab
Nitrite+Nitrate	4	NL	NA	NL	1 per 6 Months	Grab
Total Nitrogen (TN)	4	NL	NA	NL	1 per 6 Months	Calculated

NL = No Limitation; NA = Not Applicable.

1 = Water Quality Standards (9 VAC 25-260)

2 = Sector-specific storm water requirements 40 CFR Part 433

3 = Permit Writer Judgment (PWJ)

4= PWJ - Nonsignificant dischargers are subject to aggregate wasteload allocations for Total Nitrogen (TN), Total Phosphorus (TP) and Sediments under the Total Maximum Daily Load (TMDL) for Chesapeake Bay as per GM14-2011. Monitoring of TN and TP is required semiannually for two consecutive years for industrial stormwater in order to verify the aggregate wasteload allocations.

17. **Antibacksliding:** The 2008 IMTT West permit and the 2009 IMTT East permit contained limitations which have been removed in the 2015 reissuance as provided by 9VAC25-31-220.L.2.e and 9VAC25-31-220.L.b(2) as explained in item 16 above. All other limitations in the 2015 permit are protective of water quality.

18. **Special Conditions:**

I.B.1 **Operation and Maintenance Manual Requirement**

Rationale: Required by Code of Virginia § 62.1-44.16; VPDES Permit Regulation, 9 VAC 25-31-190 E, and 40 CFR 122.41(e). These require proper operation and maintenance of the permitted facility. Compliance with an approved O&M manual ensures this.

I.B.2 **Materials Handling and Storage**

Rationale: 9 VAC 25-31-50 A prohibits the discharge of any wastes into State waters unless authorized by permit. Code of Virginia § 62.1-44.16 and 62.1-44.17 authorizes the Board to regulate the discharge of industrial waste or other waste.

I.B.3 **Oil Storage Groundwater Monitoring Reopener**

Rationale: Facilities with greater than 1,000,000 gallons of regulated aboveground petroleum storage are required to monitor ground water under the Facility and Aboveground Storage Tank Regulation, 9 VAC 25-91-10 et seq. Where potential exists for groundwater pollution and that regulation does not require monitoring, the VPDES permit may contain groundwater monitoring under Code of Virginia § 62.1-44.21.

I.B.4 **Whole Effluent Toxicity Testing**

Rationale: VPDES Permit Regulation, 9 VAC 25-31-210 and 220 I, requires monitoring in the permit to provide for and assure compliance with all applicable requirements of the State Water Control Boards and the Clean Water Act.

I.B.5 **Reopeners:**

Total Maximum Daily Load / Nutrient Reopener

Rationale: Section 303(d) of the Clean Water Act requires that Total Maximum Daily Loads (TMDLs) be developed for streams listed as impaired. This special condition is to allow the permit to be reopened if necessary to bring it into compliance with any applicable TMDL approved for the receiving stream. The reopener recognizes that, according to Section 402(o)(1) of the Clean Water Act, limits and/or conditions may be either more or less

stringent than those contained in this permit. Specifically, they can be relaxed if they are the result of a TMDL, basin plan, or other wasteload allocation prepared under section 303 of the Act.

9 VAC 25-40-70 A authorizes DEQ to include technology-based annual concentration limits in the permits of facilities that have installed nutrient control equipment, whether by new construction, expansion or upgrade. 9 VAC 25-31-390.A authorizes DEQ to modify VPDES permits to promulgate amended water quality standards.

Water Quality Criteria Monitoring

Rationale: VPDES Permit Regulation, 9 VAC 25-31-220 D requires effluent limitations to be established which will contribute to the attainment or maintenance of the water quality standards.

I.B.6 Concept Engineering Report (CER)

Rationale: §62.1-44.16 of the Code of Virginia requires industrial facilities to obtain DEQ approval for proposed discharges of industrial wastewater. A CER means a document setting forth preliminary concepts or basic information for the design of industrial wastewater treatment facilities and the supporting calculations for sizing the treatment operations.

I.B.7 Facility Closure Plan

Rationale: This condition establishes the requirement to submit a closure plan for the treatment works if the treatment facility is being replaced or is expected to close. This is necessary to ensure industrial sites and treatment works are properly closed so that the risk of untreated waste water discharge, spills, leaks and exposure to raw materials is eliminated and water quality maintained. Section 62.1-44.21 requires every owner to furnish when requested plans, specification, and other pertinent information as may be necessary to determine the effect of the wastes from his discharge on the quality of state waters, or such other information as may be necessary to accomplish the purpose of the State Water Control Law.

I.B.8 Sampling to Fulfill Form 2F Requirements

Rationale: In some cases, applicants may not have been able to comply with the form 2F stormwater sampling requirements due to the lack of a representative storm event. This special condition requires the permittee to sample and submit data from a storm event to fulfill the requirements of Form 2F.

I.C.1-4 Stormwater Management Evaluation; General Stormwater Special Conditions; Stormwater Pollution Prevention Plan; and Benchmark Monitoring

Rationale: VPDES Permit Regulation, 9 VAC 25-31-10 defines discharges of stormwater from industrial activity. 9 VAC 25-31-120 requires a permit for these discharges. The Stormwater Management Evaluation, General Stormwater Special Conditions, Stormwater Pollution Prevention Plan requirements, and Benchmark Monitoring requirements of the permit are derived from the VPDES general permit for discharges of stormwater associated with industrial activity (VAR05), 9 VAC 25-151-10 et seq. VPDES Permit Regulation, 9 VAC 25-31-220 K, requires use of best management practices where applicable to control or abate the discharge of pollutants when numerical effluent limits are infeasible or the practices are necessary to achieve effluent limits or to carry out the purpose and intent of the Clean Water Act and State Water Control Law. General stormwater requirements, SWPPP requirements, and monitoring requirements have been included in accordance with the GM14-2003 Permit Manual Section IN-4 and in accordance with the VAR05 Industrial Stormwater General Permit (9 VAC 25-151-10 et seq.).

I.C.5 Facilities in the Chesapeake Bay Watershed

Rationale: Nonsignificant dischargers are subject to aggregate wasteload allocations for TN, TP, and sediments under the TMDL for Chesapeake Bay. Monitoring of TN and TP is required in the VPDES general permit for discharges of stormwater associated with industrial activity (VAR05), 9 VAC 25-151-10 in order to verify the aggregate wasteload allocations.

I.C.6 Discharges Through a Regulated MS4 to Waters Subject to the Chesapeake Bay TMDL

Rationale: VPDES Permit Regulation, 9 VAC 25-31-10 defines discharges of stormwater from industrial activity. 9 VAC 25-31-120 requires a permit for these discharges. The Discharges Through a Regulated MS4 to Waters Subject to the Chesapeake Bay TMDL requirements of the permit are derived from the VPDES general permit for discharges of stormwater associated with industrial activity (VAR05), 9 VAC 25-151-10 et seq.

I.C.7 Expansion of Facilities That Discharge to Waters Subject to the Chesapeake Bay TMDL

Rationale: VPDES Permit Regulation, 9 VAC 25-31-10 defines discharges of stormwater from industrial activity. 9 VAC 25-31-120 requires a permit for these discharges. The Expansion of Facilities That Discharge to Waters Subject to the Chesapeake Bay TMDL requirements of the permit are derived from the VPDES general permit for discharges of stormwater associated with industrial activity (VAR05), 9 VAC 25-151-10 et seq.

Part II Conditions Applicable to All Permits

Rationale: VPDES Permit Regulation, 9 VAC 25-31-190 requires all VPDES permits to contain or specifically cite the conditions listed.

19. **NPDES Permit Rating Work Sheet:** Total Score 33, See **Attachment F**.

20. **Changes to the permit:**

PARAMETER	DISCHARGE LIMITS		MONITORING REQUIREMENTS		RATIONALE
	From	To	From	To	
Part I.A.1 (Outfall 001)					
Flow	No Change	No Change	1 per Month	1 per 6 Months	9VAC25-151 requires monitoring at least semi-annually.
pH	No Change	No Change	1 per Month	1 per 6 Months	9VAC25-151 requires monitoring at least semi-annually.
Total Suspended Solids	--	NL	--	1 per 6 Months	Sector Specific benchmark monitoring added as per GM14-2003. Monitoring frequency recommended for benchmark parameters as per GM14-2003.
Total Petroleum Hydrocarbons (TPH)	15	NL	1 per Month	1 per 6 Months	Sector Specific benchmark monitoring. Monitoring frequency recommended for benchmark parameters as per GM14-2003.

Total Organic Carbon	110 mg/L	NL	1/Month	1 per 6 Months	The continued monitoring for TOC is appropriate as it is an indicator parameter for non-petroleum organic substances
Total Recoverable Cadmium	0.46 µg/L	NL	1 per 6 Months	1 per 6 Months	The continued monitoring for this parameter is appropriate because of consistent detections at Outfall 001.
Total Recoverable Copper	3.9 µg/L	NL	1 per 6 Months	1 per 3 Months (Outfall 001) 1 per 6 months (Outfalls 002 and 003)	Monitored data above screening criteria indicate that this remains a pollutant of concern (See Fact Sheet item 16). Quarterly and semiannual monitoring recommended per GM14-2003.
Total Recoverable Zinc	30 µg/L	NL	1 per 6 Months	1 per 3 Months (Outfall 001) 1 per 6 months (Outfalls 002 and 003)	Monitored data above screening criteria indicate that this remains a pollutant of concern (See Fact Sheet item 16). Quarterly and semiannual monitoring recommended per GM14-2003.
Total Recoverable Lead	4.2 µg/L	NL	1 per 6 Months	1 per 3 Months (Outfall 001) 1 per 6 months (Outfalls 002 and 003)	Monitored data above screening criteria indicate that this remains a pollutant of concern (See Fact Sheet item 16). Quarterly and semiannual monitoring recommended per GM14-2003.
Total Phosphorus	--	NL	--	1 per 6 Months	Updated in accordance with monitoring requirements of 9VAC25-151 ISWGP 2014 Regulations.
Total Kjeldahl Nitrogen	--	NL	--	1 per 6 Months	Updated in accordance with monitoring requirements of 9VAC25-151 ISWGP 2014 Regulations.
Nitrite+Nitrate	--	NL	--	1 per 6 Months	Updated in accordance with monitoring requirements of 9VAC25-151 ISWGP 2014 Regulations.
Total Nitrogen	--	NL	--	1 per 6 Months	Updated in accordance with monitoring requirements of 9VAC25-151 ISWGP 2014 Regulations.
NL = No Limitation					

---2015 Part I.A.1. footnote (b): Added to clarify how data should be input if no discharge occurs.
 ---2015 Part I.A.1. footnote (c): Added the monitoring period for semiannual and quarterly monitoring to clarify monitoring expectations as specified in 9VAC25-151.
 ---2015 Part I.A.1. footnote (d): Included in the 2008 permit as Part I.A.1.a footnote (b).
 ---2015 Part I.A.1.a footnote (e): Added to reference permit section for quantification levels and reporting instructions.
 ---2015 Part I.A.1. footnote (f): Added to specify monitoring requirements for Total Phosphorus and Total Nitrogen.
 ---2015 Part I.A.1 footnote (g): Added to define Total Nitrogen.
 ---2015 Part I.A.1 footnote (h) and (i): Added to clarify sampling location.
 ---2015 Part I.A.2.: Included in the 2008 permit as Part I.A.5; added condition for oil sheen free effluent.
 ---2015 Part I.A.3: Included in the 2008 permit as Part I.A.6.
 ---2015 Part I.A.4: Included in the 2008 permit as Part I.A.3.

Part I Special Condition Changes:

From	To	Rationale
I.B.1	--	Notification Levels special condition deleted as this condition refers to process wastewater discharges per 9VAC25-31-200A.
I.B.2	I.B.1	Operation and Maintenance Manual Requirement: Reflects revisions consistent with GM14-2003.
I.B.3	I.B.2	Materials Handling and Storage: revised to reflect GM14-2003 with a BMP reference.
I.B.4	--	Compliance Reporting: condition deleted as it applies to permits with water quality based limits.
I.B.5	--	Hydrostatic Testing: removed as per DEQ's and permittee's agreement. Hydrostatic testing will be covered under general permit per 9 VAC 25-120 et seq. See staff comment a. below.
I.B.6	I.B.3	Oil Storage Groundwater Monitoring Reopener: updated in accordance with GM14-2003.
I.B.7	I.B.4	Whole Effluent Toxicity (WET) Monitoring: modified to reflect 48-Hour Static Acute test requirement only. Language revised in accordance with guidance from OWP&CA.
I.B.8	I.B.5	Reopeners: TMDL Reopener expanded to include the Nutrient Reopeners (GM07-2008 Amendment 2) and the Water Quality Criteria Reopener, and renamed "Reopeners."
--	I.B.6	Concept Engineering Report: special condition added to all industrial permits in accordance with GM14-2003.
I.B.9	--	Schedule of Compliance: Removed schedule of compliance because there is no compliance schedule associated with the 2015 permit.
--	I.B.7	Facility Closure Plan: Special condition added in accordance with GM14-2003 boilerplate.
I.B.10	--	Water Quality Monitoring: Removed because this special condition applies to new industrial stormwater issuances only.
--	I.B.8	Form 2F sampling: this condition was added to the permit as Form 2F and respective sampling requirements were not submitted with the permit reissuance application.
I.B.11	--	Water Quality Criteria Reopener: this special condition was incorporated into I.B.6.
--	Part I.C.1	Added Stormwater Management Evaluation in accordance with GM14-2003 due to exceedance of screening criteria for copper, lead and zinc.
--	Part I.C.2 through I.C.5	General Stormwater Special Conditions and Stormwater Pollution Prevention Plan requirements added in accordance with GM14-2003.
--	Part I.C.5	Benchmark Monitoring: Special condition added in accordance with GM14-2003.
--	Part I.C.6	Added in accordance with the ISWGP, 9VAC25-151-10 et seq.
--	Part I.C.7	Added in accordance with the ISWGP, 9VAC25-151-10 et seq.
--	Part I.C.8	Added in accordance with the ISWGP, 9VAC25-151-10 et seq.

Part II Condition Changes:

Part II.	Part II.	Updated in accordance with GM14-2003 boilerplate language.
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21. **VariANCES/Alternate Limits or Conditions:** None

22. **Public Notice Information required by 9 VAC 25-31-280 B:**

Comment period: Publishing Newspaper: *Style Weekly*
Publication Dates: February 18, 2015 and February 25, 2015
Start Date: February 18, 2015 End Date: March 23, 2015

All pertinent information is on file and may be inspected or copied by contacting Laura Galli at:

Virginia Department of Environmental Quality (DEQ)
Piedmont Regional Office
4949-A Cox Road
Glen Allen, Virginia 23060-6296

Telephone Number 804/527-5095
Facsimile Number 804/527-5106
Email laura.galli@deq.virginia.gov

Persons may comment in writing or by email to the DEQ on the proposed permit action, and may request a public hearing, during the comment period. Comments shall include the name, address, and telephone number of the writer and of all persons represented by the commenter/requester, and shall contain a complete, concise statement of the factual basis for comments. Only those comments received within this period will be considered. The DEQ may decide to hold a public hearing, including another comment period, if public response is significant and there are substantial, disputed issues relevant to the permit. Requests for public hearings shall state 1) the reason why a hearing is requested; 2) a brief, informal statement regarding the nature and extent of the interest of the requester or of those represented by the requester, including how and to what extent such interest would be directly and adversely affected by the permit; and 3) specific references, where possible, to terms and conditions of the permit with suggested revisions. Following the comment period, the Board will make a determination regarding the proposed permit action. This determination will become effective, unless the DEQ grants a public hearing. Due notice of any public hearing will be given. The public may review the draft permit and application at the DEQ Piedmont Regional Office by appointment.

23. **Chesapeake Bay TMDL:** The receiving streams are unnamed tributaries to the James River. During the 2012 305(b)/303(d) Integrated Water Quality Assessment, the unnamed tributaries were considered Category 2B waters ("Waters are of concern to the state but no Water Quality Standard exists for a specific pollutant, or the water exceeds a state screening value or toxicity test."). The streams are included under the Virginia Department of Health Fish Consumption Advisory for the James River and its tributaries due to kepone in fish tissue; therefore they were assessed as fully supporting with observed effects for the Fish Consumption Use. The other designated uses were not assessed.

The discharges were included in the James River and Tributaries – City of Richmond Bacterial TMDL, which was approved by the EPA on 11/4/2010 and by the SWCB on 6/29/2012. The outfalls were modeled, but were not assigned an E. coli wasteload allocation because the facility is not permitted for fecal coliform control.

The facility discharges to an unnamed tributary of the James River Tidal Freshwater (JMSTF2) segment of the Chesapeake Bay watershed. The receiving stream has been addressed in the Chesapeake Bay TMDL, approved by EPA on December 29, 2010. The TMDL addresses dissolved oxygen (DO), chlorophyll a, and submerged aquatic vegetation (SAV) impairments in the main stem Chesapeake Bay and its tidal tributaries by establishing non-point source load allocations (LAs) and point-source waste load allocations (WLAs) for Total Nitrogen (TN), Total Phosphorus (TP) and Total

Suspended Solids (TSS) to meet applicable Virginia Water Quality Standards contained in 9VAC25-260-185.

Implementation of the Chesapeake Bay TDML is currently accomplished in accordance with the Commonwealth of Virginia's Phase I Watershed Implementation Plan (WIP), approved by EPA on December 29, 2010. The approved WIP recognizes the "General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed of Virginia"(Nutrient General Permit), 9VAC25-820, as controlling the nutrient allocations for non-significant Chesapeake Bay dischargers. The approved WIP states that for non-significant Municipal and Industrial facilities, nutrient WLAs are to be consistent with Code of Virginia procedures, which set baseline WLAs to 2005 permitted design capacity nutrient load levels. In accordance with the WIP, TN and TP WLAs for non-significant facilities are considered aggregate allocations and will not be included in individual permits. The WIP also considers TSS WLAs for non-significant facilities to be aggregate allocations, but TSS limits are to be included in individual VPDES permits in conformance with the technology-based requirements of the Clean Water Act. However, the WIP recognizes that so long as the aggregated TSS permitted loads for all dischargers is less than the aggregated TSS load in the WIP, the individual permit will be consistent with the TMDL.

40 CFR 122.44(d)(1)(vii)(B) requires permits to be written with effluent limits necessary to meet water quality standards and to be consistent with the assumptions and requirements of applicable WLAs. This facility is classified as a non-significant Chesapeake Bay discharger because it has a permitted design capacity flow, or equivalent load of less than 500,000 gallons per day into non-tidal waters. This facility has not made application for a new or expanded discharge since 2005. It is therefore covered by rule under the 9VAC25-820 regulation. In accordance with the WIP, TN and TP load limits are not included in this individual permit, but are consistent with the TMDL because any existing nutrient loads are in conformance with the facility's 2005 permitted design, or equivalent capacity loads.

The stormwater discharges managed through this permit are considered part of the aggregated wasteload allocations for regulated stormwater discharges. The stormwater outfalls covered by this permit are not subject to the technology-based TSS requirement of the Clean Water Act; therefore, technology-based TSS limitations are not required. As the TSS and nutrient content of stormwater discharges authorized by this permit are provided for in aggregated loads under the TMDL, the discharges are in conformance with the TMDL.

24. **Additional Comments:**

Previous Board Action: Warning Letters were issued on March 9, 2010; December 30, 2010; June 28, 2011; February 12, 2012 and January 8, 2013 in regards to the exceedance of the 2008 permit limits for metals at outfall 001.

Staff Comments:

- a. *Hydrostatic Testing:* The permittee may handle, store, and distribute a variety of gasoline and non-gasoline petroleum substances at this facility. In addition to being required by law to conduct hydrostatic testing on their AST's, the permittee may need to conduct hydrostatic testing on pipelines or tanks when the products are switched due to density differences. DEQ staff contacted the permittee by email on 2/28/2013 and inquired whether the permittee preferred to keep hydrostatic testing requirements in their individual permit, or if they would prefer the option to obtain general permit coverage under 9 VAC 25-120 et seq. (*General VPDES Permit for Discharges from Petroleum Contaminated Sites, Groundwater Remediation, and Hydrostatic Tests*) for authorization to discharge hydrostatic test waters. The permittee responded by email on 3/4/2013 indicating that they would prefer to obtain coverage under the general permit. Consequently the hydrostatic

testing requirements formerly included in past permits were removed from the 2015 permit reissuance.

- b. *Monitoring Frequency Reduction:* A reduction in monitoring frequency was not considered for this permit reissuance due to the intermittent nature of the permittee's discharge and recommended monitoring frequencies for industrial stormwater included in GM14-2003.

Threatened and Endangered Species Review: IMTT Virginia East was identified on the 2014 list of facilities requiring threatened and endangered species review through DGIF and/or DCR.

VDH Comments: In a memo dated March 6, 2013 (West facility), and October 7, 2014 (East facility) The Virginia Department of Health East Central Field Office, Office of Drinking Water stated, "There are no apparent impacts to waterworks sources as a result of this permit." See **Attachment G**.

DCR Comments: See **Attachment H**.

Public Comment:

Owner Comments: See **Attachment I**.

Fees: Annual maintenance fees are up to date, last paid September 10, 2014.

Controversial Project / Permit? No.

E-DMR Participation: The facility is enrolled in E-DMR. Enrollment date: 3/19/2010.

Virginia Environmental Excellence Program (VEEP): The facility is not enrolled in VEEP.

Planning Conformance Statement: The discharge is in conformance with the existing planning documents for the area.

Local Government Notification of Public Notice: Local government officials were notified of the public comment period on February 13, 2015. In accordance with the Code of Virginia, §62.1-44.15:01, the following individuals received the notification: The City of Richmond Mayor, the President of the Richmond City Council, and the Richmond Regional Planning District Commission (RRPDC).

25. Summary of attachments to this Fact Sheet:
- | | |
|--------------|---|
| Attachment A | Site Map and Flow Diagrams |
| Attachment B | Flow Frequency Memorandum |
| Attachment C | Site Visit |
| Attachment D | Data Analyses |
| Attachment E | WET Tests results |
| Attachment F | NPDES Industrial Permit Rating Worksheet |
| Attachment G | VDH Coordination Response |
| Attachment H | DCR Coordination Response |
| Attachment I | Owner Comments and DEQ Response to Comments |